accordance with the provisions of part 5 of this chapter, Experimental Radio Services.) The factors with respect to which the Commission will make a preliminary determination before acting on an application filed under this paragraph are as follows:

- (1) That the public interest, convenience or necessity warrants consideration of the establishment of the proposed service or the use of the proposed frequency;
- (2) That the proposed operation appears to warrant consideration to effect a change in the provisions of the rules in this part; and/or
- (3) That some operational data should be developed for consideration in any rule making proceeding which may be initiated.
- (b) Applications for stations that are intended to be used in the development of a proposed service must be accompanied by a petition to amend the Commission's rules with respect to frequencies and such other items as may be necessary to provide for the regular establishment of the proposed service.

§ 101.409 Terms of grant; general limitations.

- (a) Developmental authorizations normally will be issued for one year, or such shorter term as the Commission may deem appropriate in any particular case, and will be subject to cancellation without hearing by the Commission at any time upon notice to the licensee.
- (b) Where some phases of the developmental program are not covered by the general rules of the Commission or by the rules of this part, the Commission may specify supplemental or additional requirements or conditions in each case as it may deem necessary in the public interest, convenience or necessity
- (c) Frequencies allocated to the service toward which such development is directed will be assigned for developmental operation on the basis that no interference will be caused to the regular services of stations operating in accordance with the Commission's Table of Frequency Allocations (§2.106 of this chapter).
- (d) The rendition of communication service for hire is not permitted under

any developmental authorizations unless specifically authorized by the Commission.

(e) The grant of a developmental authorization carries with it no assurance that the developmental program, if successful, will be authorized on a permanent basis either as to the service involved or the use of the frequencies assigned or any other frequencies.

§ 101.411 Supplementary showing required.

- (a) Authorizations for development of a proposed radio service in the services included in this part will be issued only upon a showing that the applicant has a definite program of research and development, the details of which must be set forth, which has reasonable promise of substantial contribution to these services within the term of such authorization. A specific showing should be made as to the factors which qualify the applicant technically to conduct the research and development program, including a description of the nature and extent of engineering facilities that the applicant has available for such purposes.
- (b) Expiring developmental authorizations may be renewed only upon the applicant's compliance with the applicable requirements of §101.413 (a) and (b) relative to the authorization sought to be renewed and upon a factual showing that further progress in the program of research and development requires further radio transmission and that the public interest, convenience or necessity would be served by renewal of such authorization.

§101.413 Developmental report required

(a) Upon completion of the program of research and development, or, in any event, upon the expiration of the instrument of station authorization under which such investigations were permitted, or at such times during the term of the station authorization as the Commission may deem necessary to evaluate the progress of the developmental program, the licensee must submit a comprehensive report on the following items, in the order designated:

§ 101.501

- (1) Report on the various phases of the project which were investigated;
- (2) Total number of hours of operation on each frequency assigned;
- (3) Copies of any publication on the project;
- (4) Detailed analysis of the result obtained: and
 - (5) Any other pertinent information.
- (b) In addition to the information required by paragraph (a) of this section, the developmental report of a station authorized for the development of a proposed radio service must include comprehensive information on the following items:
- (1) Probable public support and methods of its determination;
- (2) Practicability of service operations:
- (3) Interference encountered;
- (4) Pertinent information relative to merits of the proposed service;
- (5) Propagation characteristics of frequencies used, particularly with respect to the service objective;
- (6) Frequencies believed to be more suitable and reasons therefor; and
- (7) Type of signals or communications employed in the experimental work
- (c) Developmental reports will be made a part of the Commission's public records, except upon the applicant's specific request for confidentiality and Commission approval in accordance with §0.459 of this chapter. Information determined confidential by the Commission will not be publicly disclosed.

[61 FR 26677, May 28, 1996, as amended at 63 FR 68983, Dec. 14, 1998]

Subpart G—24 GHz Service and Digital Electronic Message Service

§ 101.501 Eligibility.

See §101.147(n) for licensing of DEMS facilities in the 10.6 GHz band. Applications for new facilities using the 18 GHz band are no longer being accepted. Any entity, other than one precluded by §101.7, is eligible for authorization to provide 24 GHz Service under this subpart.

[65 FR 59359, Oct. 5, 2000]

§ 101.503 Digital Electronic Message Service Nodal Stations.

10.6 GHz DEMS Nodal Stations may be authorized only as a part of an integrated communication system wherein 10.6 GHz DEMS User Stations associated therewith also are licensed to the 10.6 GHz DEMS Nodal Station licensee. Applications for 10.6 GHz DEMS Nodal Station licenses should specify the maximum number of 10.6 GHz DEMS User Stations to be served by that nodal station. Any increase in that number must be applied for pursuant to §1.913 of this chapter.

[65 FR 59359, Oct. 5, 2000]

§101.505 Frequencies.

Frequencies, and the conditions on which they are available, for DEMS operations are contained in this subpart as well as in \$101.147(m), (n), and (r)(9).

[65 FR 59359, Oct. 5, 2000]

§ 101.507 Frequency stability.

The frequency stability in the 10,550–10,680 MHz band must be $\pm 0.0001\%$ for each DEMS Nodal Station transmitter and $\pm 0.0003\%$ for each DEMS User Station transmitter. The frequency stability in the 24,250–25,250 MHz bands must be $\pm 0.001\%$ for each Nodal Station transmitter and $\pm 0.003\%$ for each User Station transmitter.

68 FR 4961, Jan. 31, 2003]

§ 101.509 Interference protection criteria.

- (a) As a condition for use of frequencies in this service each licensee is required to:
- (1) Engineer the system to be reasonably compatible with adjacent and cochannel operations in the same or adjacent areas on all frequencies; and
- (2) Cooperate fully and in good faith to resolve whatever potential interference and transmission security problems may be present in adjacent and co-channel operations.
- (b) All harmful interference to other users of co-channel and adjacent channel use in the same or adjacent geographical area are prohibited. In areas where Economic Areas are in close proximity, careful consideration